

CLAIMS

5 1. An immunogenic peptide constituting a T epitope presented by MHC I, characterized in that it consists of a fragment of 8 to 11 consecutive amino acids of the EphA2 antigen.

2. The immunogenic peptide as claimed in claim 1, characterized in that it is chosen from:

- the peptide of sequence IMNDMPIYM (SEQ ID NO: 4);
- the peptide of sequence VLLLVLAGV (SEQ ID NO: 6);
- the peptide of sequence VLAGVGFFI (SEQ ID NO: 7);
- the peptide of sequence TLADFDPRV (SEQ ID NO: 8).

10 3. An immunogenic peptide constituting a T epitope presented by MHC I, characterized in that it is derived from a peptide consisting of a fragment of 8 to 11 consecutive amino acids of the EphA2 antigen, by substitution of at least one amino acid of said peptide with an amino acid which increases the affinity of said peptide for an MHC I allele.

15 20 4. The peptide as claimed in claim 3, characterized in that it is derived from a peptide consisting of a fragment of 8 to 11 consecutive amino acids of the EphA2 antigen, by substitution of the N-terminal amino acid of said peptide with a tyrosine residue.

25 5. The peptide as claimed in claim 4, characterized in that it is defined by the sequence YMPIYMYSV (SEQ ID NO: 9).

6. A polynucleotide encoding a peptide as claimed in any one of claims 1 to 5.

30 7. A composition comprising at least one peptide as claimed in any one of claims 1 to 6 or a polynucleotide as claimed in claim 5.

35 8. The composition as claimed in claim 7, characterized in that it is a multiepitope composition also comprising one or more other immunogenic peptide(s) or one or more polynucleotide(s) encoding said peptide(s).

9. The composition as claimed in claim 7, characterized in that it is a chimeric polypeptide comprising at least one copy of a peptide as claimed in any one of claims 1 to 5 and/or at least one copy of another 5 immunogenic peptide, or a polynucleotide encoding said chimeric polypeptide.

10. The use of a peptide as claimed in any one of claims 1 to 5, of a polynucleotide as claimed in claim 6 or of a composition as claimed in any one of claims 7 to 9, 10 for obtaining a medicinal product.

11. The use as claimed in claim 10, characterized in that said medicinal product is intended for antitumor immunotherapy.

12. The use as claimed in claim 11, characterized 15 in that said medicinal product is intended for the immunotherapy of tumors expressing the EphA2 antigen.

13. The use as claimed in any one of claims 10 to 12, characterized in that said medicinal product is intended for the treatment of HLA-A\*0201 patients.